Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)	
Vistar Data Communications, Inc.)	E'L. N GEG I IC 10000733 01301
Application For a Blanket Authorization To)	File No. SES-LIC-19990722-01281
Operate 100,000 Mobile Earth Terminals in the	,	
1530-1544 MHz and 1626.5-1645.5 MHz)	
Frequency (E990316))	

ORDER AND AUTHORIZATION

Adopted: June 28, 2002 Released: July 2, 2002

By the Deputy Chief, Satellite Division, International Bureau:

I. Introduction

1. By this Order, we grant Vistar Data Communications, Inc. (Vistar) regular authority, for a term of two years, to operate the 20,000 half-duplex, mobile earth terminals (METs) it is currently operating on a temporary basis in the lower L-band. This will enable Vistar to continue providing U.S. consumers with innovative mobile data communication services.

II. Background

2. On July 22, 1999, Vistar, a Canadian-owned, U.S. corporation,³ filed an application requesting blanket authority to operate up to 100,000 half-duplex METs throughout the United States, using the U.S.-licensed AMSC-1 satellite. AMSC-1 satellite is owned and operated by Mobile Satellite Ventures Subsidiary, LLC (MSV).⁴ Vistar is currently operating 20,000 half-duplex METs in the lower L-band,

¹ A half-duplex MET cannot receive and transmit data messages simultaneously. It must finish transmitting before it can receive an incoming message. Conversely, a full-duplex MET can receive a data message while transmitting.

² The "L-band" is a general designation for frequencies from 1 to 2 GHz. In this Order and Authorization, however, the term "L-band" denotes only the 1545-1559 MHz and 1646.5-1660.5 MHz frequency band ("upper L-band") and the 1525-1530 MHz, 1530-1544 MHz, and 1626.5-1645.5 MHz frequency bands ("lower L-band"). The United States is the only country that distinguishes between the "upper" and "lower" L-band.

³ Vistar is incorporated in Pennsylvania. It is a wholly-owned subsidiary of Vistar Telecommunications, Inc., a Canadian telecommunications company specializing in the design and implementation of satellite communications systems. *See* Vistar Blanket License Application at 2.

⁴ MSV is part of a Canadian-American joint venture of the former U.S. licensee, Motient Services, Inc. (Motient) and the Canadian licensee, TMI Communications and Company, LP (TMI).). *See Motient Services Inc. and TMI* (continued....)

pursuant to STA, granted on February 7, 2002.⁵ Vistar says it is seeking to expand its authority to operate up to 100,000 half-duplex METs on a regular basis in order to make a more expansive mobile data communications system available to U.S. customers. The proposed METs will operate in the 1530-1544 MHz frequency band for the satellite-to-Earth downlink and 1626.5-1645.5 MHz frequency band for the Earth-to-satellite uplink. Noting that these bands are allocated to Mobile Satellite Service (MSS), aeronautical telemetry, and Maritime Mobile Satellite Service (MMSS), Vistar claims that its operations will not cause harmful interference to other services operating in these bands, including the Global Maritime Distress and Safety System (GMDSS).⁶

III. Discussion

- 3. The National Telecommunications and Information Administration (NTIA) submitted comments that did not oppose grant of Vistar's application, subject to certain conditions. Vistar's application, however, was opposed by Space System License, Inc. and Iridium LLC (collectively Iridium) and Globalstar L.P. (Globalstar). Both petitioners allege that Vistar's application should be denied because MSV's operation of the AMSC-1 satellite in the lower L-band cannot accommodate the 100,000 METs specified by Vistar because MSV's lower L-band authority is limited to 15,000 METs. The petitioners also allege that Vistar's application violated the so called "freeze" the Commission placed on the filing of applications to use the lower L-band frequencies, pending adoption of regulatory policies for the provision of service in the lower L-band.
- 4. At the time Globalstar and Iridium filed their petitions, no U.S. space station was permanently licensed to operate in the lower L-band. The Commission also had not adopted rules and policies governing the use of frequencies in the lower L-band. MSV was authorized, however, to use spectrum in the lower L-band coordinated for the U.S. system, on a temporary basis. 11
- 5. On February 7, 2002, the Commission released the *Lower L-band Report and Order*, establishing licensing rules and policies governing use of the lower L-band. At the same time, the (Continued from previous page)

Communications and Company, LP Assignors, 16 FCC Rcd 20,469 (2001). At the time Vistar filed its application, Motient (formerly AMSC Subsidiary Corporation) was the AMSC-1 licensee. In order to avoid confusion, both AMSC and Motient are referred to as MSV in this Order and Authorization.

⁵ See FCC File No. SES-STA-20010808-01472, granted February 7, 2002.

⁶ See Vistar Application at 3-5.

⁷ See Letter from Jim Vorhies, Acting Program Manager, Spectrum Plans, NTIA, to Thomas S. Tycz, Chief, Satellite Division, International Bureau, FCC, dated May 24, 2002.

⁸ See AMSC Subsidiary Corporation, Order on Reconsideration, 11 FCC Rcd 5527 (Int'l Bur. 1995).

⁹ See Globalstar Petition to Dismiss or Deny at 1-3, 5, and Iridium Petition to Deny or Defer at 3-5.

¹⁰ See In the Matter of Establishing Rules and Policies for the Use of Spectrum for Mobile Satellite Service in the Upper and Lower L-band, Notice of Proposed Rulemaking, 11 FCC Rcd 11675 (1996) (Lower L-band Notice).

¹¹ See AMSC Subsidiary Corporation, 10 FCC Rcd 10458 (Int'l Bur. 1995) (AMSC L-band Authorization).

Commission authorized MSV to provide MSS in the lower L-band on a regular basis. In view of this action, issues related to the scope of MSV's authority and the so-called "freeze" are moot. 12

- 6. Iridium is also concerned that grant of Vistar's application may result in Vistar's METs causing harmful interference to the Iridium system operating in the 1621,35-1626,5 MHz band. Consequently, Iridium asked that grant of Vistar's application be conditioned upon its completion of coordination with Iridium.
- 7. We find no need to impose a condition on Vistar to coordinate with Iridium. Rather, we have imposed a condition to ensure that Vistar's METs operate in a manner consistent with the Commission's out-of-band emissions requirements.¹³ Moreover, in the event that Iridium actually experiences harmful interference from out-of-band emissions caused by Vistar, we expect the parties to attempt to resolve the matter between them. If a mutually acceptable solution is not possible, the Commission will then intervene. 14
- 8. Lastly, Globalstar contends that Vistar's application should be denied because Vistar's METs do not meet the priority and preemptive access requirements mandated by Footnote US315 to the U.S. Table of Frequency Allocations to Section 2.106 of the Commission's rules, 47 C.F.R. § 2.106.15 Footnote US315 provides that L-band MSS systems may not interfere with MMSS distress and safety communications that also operate in these frequencies. ¹⁶ Footnote US315 protects MMSS distress and safety communications, such as GMDSS, domestically by providing priority access and real-time preemptive capability for distress and safety communications. In the Lower L-Band Report and Order, the Commission observed that full compliance with Footnote US315 was not possible for METs operating in half-duplex mode because the half-duplex transmission cannot be interrupted once it has started. The Commission noted that, over the past two years, the International Bureau has waived full compliance with Footnote US315 because experience has shown that, with appropriate restraints and the due to the short duration of half-duplex transmissions, the integrity of maritime safety and distress communications can be maintained. Given the importance of safety-related communications, the Commission declined, however, to waive Footnote US315 for half-duplex METs in the lower L-band, on a permanent basis. Rather, it stated that requests for operational authority subject to waiver of Footnote

¹² See In the Matter of Establishing Rules and Policies for the Use of Spectrum for Mobile Satellite Service in the Upper and Lower L-band, Report and Order, 17 FCC Rcd 2704 (2002) (Lower L-band Report and Order).

¹³ See Amendment of Part 2 and 25 to Implement the Global Mobile Personal Communications by Satellite (GMPCS) Memorandum of Understanding and Arrangements; Petition of the National Telecommunications and Information Administration to Amend Part 25 of the Commission's Rules to Establish Emissions Limits for Mobile and Portable Earth Stations Operating in the 1610-1660.5 MHz Band, Report and Order and Further Notice of Proposed Rulemaking, FCC 02-134 (rel. May 14, 2002).

¹⁴ See, e.g., SatCom Systems, 14 FCC Rcd 20798 (1999), aff'd sub nom. AMSC v. FCC, 216 F.3d 1154 (D.C. Cir. 2000).

¹⁵ See Globalstar Petition to Dismiss or Deny at 4.

¹⁶ 47 C.F.R. § 2.106.

US315 would continue to be considered on a case-by-case basis. The Commission further noted that the NTIA has indicated that if a terminal is capable of, among other things, ceasing transmissions and inhibiting further transmissions within one second, that terminal would be considered to meet the real time preemption requirements.¹⁷

- 9. Vistar concedes that its half-duplex METs cannot achieve the priority and preemptive access to maritime safety services required by Footnote US315, and requests that a temporary waiver be granted. Vistar points out that, pursuant to waivers of Footnote US315, thousands of METs have operated for years without adversely affecting the GMDSS. Accordingly, Vistar claims that because its METs can be shut down in less than 20 seconds, its system can easily co-exist with GMDSS.
- 10. Vistar has demonstrated that temporary waiver of Footnote US315 is justified to enable it to operate in the lower L-band on a permanent basis. We have found that the ability of a half-duplex MET to shut down in less than 48 seconds is sufficient to grant temporary waiver of Footnote US315. Vistar's informs us that its METs are capable of shutting down in less than half that time. As previously mentioned, Vistar is currently operating half-duplex terminals, on a temporary basis, pursuant to waiver of Footnote 315 granted to MSV with no apparent interference to GMDSS.
- 11. Although the NTIA in its comments did not oppose a temporary waiver of the real-time priority and preemptive requirements of Footnote US315, the NTIA is reluctant to approve an increase in the number of Vistar METs. In 1995, when half-duplex METs were initially granted authority to operate in the lower L-band, there was relatively little MMSS traffic: GMDSS had not been fully implemented. It was, therefore, concluded that operation of half-duplex METs operation, on a limited scale and with appropriate safeguards, would not adversely impact the important maritime distress and safety-related services.²⁰
- 12. Since 1995, the growth of L-band MSS has increased the likelihood of possible harmful interference with MMSS distress and safety communications. Furthermore, the possible likelihood of interference will further increase as more MMSS terminals are placed into operation. For these reasons and after consultation with the NTIA, we decline to grant Vistar's request for a fivefold increase in the number of half-duplex METs it is currently authorized to operate in the lower L-band.

²⁰ See AMSC L-band Authorization at 10461.

¹⁷ See In the Matter of Establishing Rules and Policies for the Use of Spectrum for Mobile Satellite Service in the Upper and Lower L-band, Report and Order, 17 FCC Rcd 2704, ¶¶ 30-41 (2002) (Lower L-band Report and Order).

¹⁸ See, e.g., AMSC L-band Authorization at 10460.

¹⁹ See footnote 5, supra.

²¹ See Lower L-band Report and Order, 17 FCC Rcd at ¶¶ 36-37.

13. Consistent with the NTIA's comments, we grant Vistar regular authority for a term of two years with no increase in the number of METs beyond the number it is currently authorized.²² This balances Vistar's need to accommodate customer demand for mobile data services and the need to ensure the integrity of maritime safety communications. We encourage Vistar to continue to work to bring its half-duplex METs into full compliance with Footnote US315.

IV. Conclusion and Ordering Clauses

- 14. Accordingly, IT IS ORDERED that Application File No.SES-LIC-19990722-01281 IS GRANTED, to the extent described herein, and Vistar Data Communications, Inc. IS AUTHORIZED to operate its currently authorized 20,000 half-duplex METs, on a non-common carrier basis, in the lower L frequency bands 1626.5-1645.5 MHz and 1530-1544 MHz through the AMSC-1 space station at 101° W.L. to provide mobile satellite service in the United States for a license term of two years, in accordance with the technical specifications set forth in its application and its Radio Station Authorization, and consistent with the Commission's rules, subject to the conditions set forth below.
- 15. IT IS FURTHER ORDERED that Vistar Data Communications, Inc. IS GRANTED a waiver to the preemption and real-time access requirements of Footnote US315 for the term of the license.
- 16. IT IS FURTHER ORDERED that Vistar Data Communications, Inc.'s operation of the 20,000 METs is on a secondary basis to safety and distress communications of those stations operating in the Global Maritime Distress Satellite Service.
- 17. IT IS FURTHER ORDERED that Vistar Data Communications, Inc.'s MET operations shall be limited to the portions of the 1525-1559 and 1626.5-1660.5 MHz band coordinated for the satellite being accessed in the most recent annual L-band operator-to-operator agreement.
- 18. IT IS FURTHER ORDERED that in the absence of a continuing annual operator-to-operator coordination agreement, Vistar Data Communications, Inc.'s operation in the 1525-1559 and 1626.5-1660.5 MHz band will be on a non-harmful interference basis. Consequently, in the absence of a coordination agreement, Vistar Data Communications, Inc. shall not cause harmful interference to any other lawfully operating satellite or radio facility and shall cease operations upon written notification of such interference. Furthermore, Vistar Data Communications, Inc. must notify all other operators in these frequency bands that it will be operating on a non-harmful interference basis. Vistar Data Communications, Inc. must also notify its customers in the United States that its operations are on a non-harmful interference basis.
- 19. IT IS FURTHER ORDERED that Vistar Data Communications, Inc.'s METs shall comply with the out-of-band emission limits set forth in Section 25.216 of the Commission's rules. *See Out-of-Band Emission Order*, FCC 02-34 (rel. May 14, 2002).
- 20. This authorization does not permit Vistar Data Communications, Inc. to provide commercial mobile radio service (CMRS) to end-users (A) the public, or (B) such classes of users as to be effectively available to a substantial portion of the public for profit and for interconnection with the public switched network. If Vistar Data Communications, Inc. wishes to provide CMRS, which is

5

²² See Letter from Jim Vorhies, Acting Program Manager, Spectrum Plans, NTIA, to Thomas S. Tycz, Chief, Satellite Division, International Bureau, FCC, dated May 24, 2002.

classified as a common carrier service, it must obtain authority to modify this license to permit the provision of common carrier service and must obtain any requisite authority under Section 214 of the Communication Act, 47 U.S.C. § 214, before providing such service.

- 21. IT IS FURTHER ORDERED that this license shall not vest in Vistar Data Communications, Inc. any right to operate Earth stations or use the assigned frequencies beyond the term thereof or in any manner other than authorized herein, and neither Vistar Data Communications, Inc. nor the rights granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act.
- 22. IT IS FURTHER ORDERED that the license term for the METs that are authorized by the *Order and Authorization* be for two years.
- 23. IT IS FURTHER ORDERED that Petition to Dismiss or Deny and to Deny or Defer filed by Globalstar L.P. and Space System Licensee, Inc. and Iridium LLC, respectively ARE DENIED.
- 24. This Order is issued pursuant to Section 0.216 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release.

FEDERAL COMMUNICATIONS COMMISION

Cassandra C. Thomas Deputy Chief, Satellite Division